



NOvA Experiment Status

Steve Magill Argonne National Laboratory
All Experimenter's Meeting, November 11, 2013

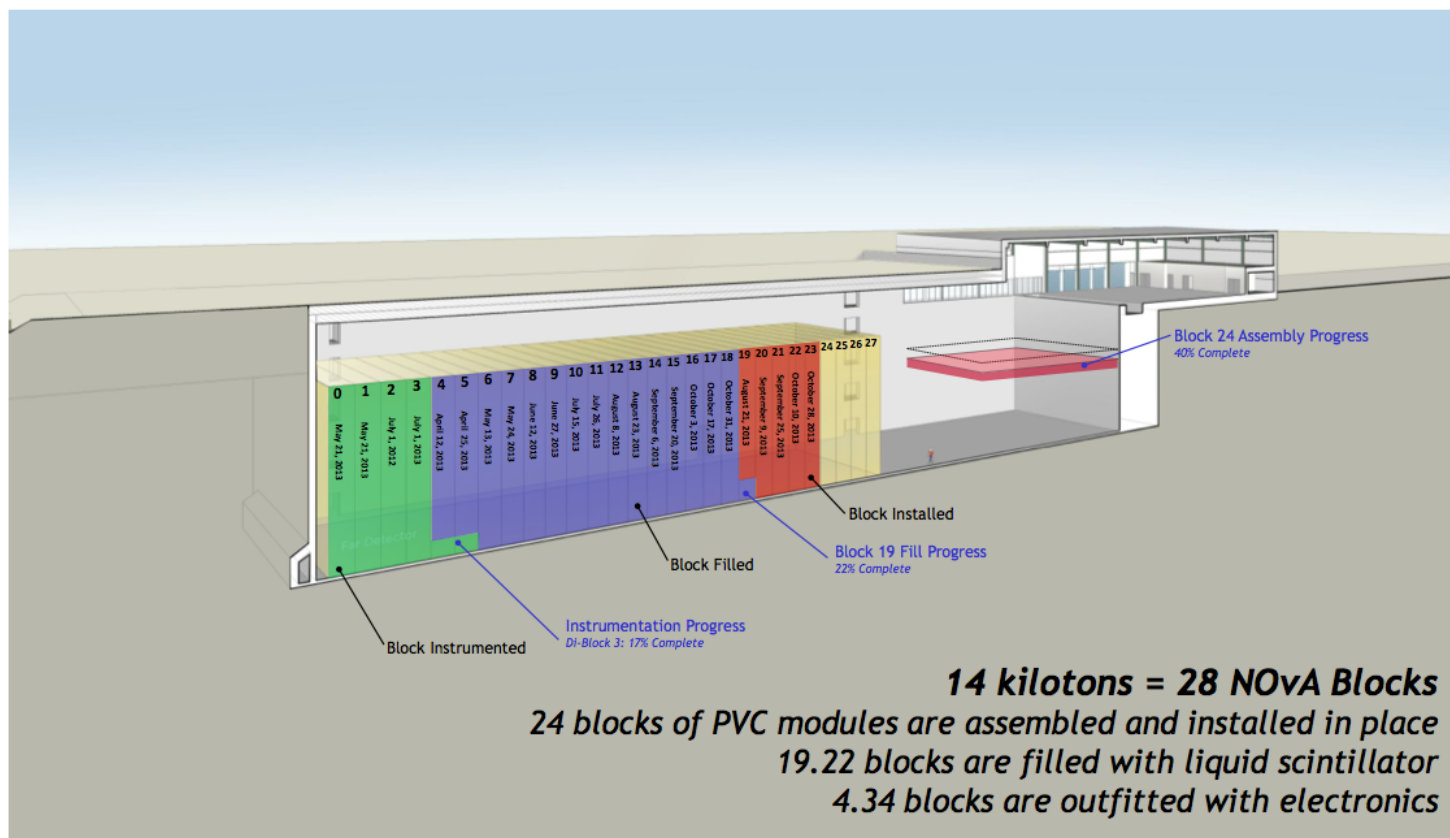
Far Detector Progress



The Intensity Frontier

NOvA Far Detector Assembly Progress

Status Date: 04NOV13



More FarDet Progress

Di-Block Status (11/11/13)

Di-Block Outfitting Status														
Position	DiBlock													
	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1			DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
2			DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
3			DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
4			DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
5			DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
6			DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
7	DCM Avail	DCM Avail	DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
8	DCM Avail	DCM Avail	DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
9	DCM Avail	DCM Avail	DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
10	DCM Avail	DCM Avail	DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
11	DCM Avail	DCM Avail	DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail
12	DCM Avail	DCM Avail	DCM Avail	DCM Avail	Filling	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	FEB Avail	APD Avail	APD Avail

Block Installation Status																				
Status	Block																			
	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8
					Set	Set	Set	Set	Filling	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled	Filled

Filling block 19 (20th block) vertical modules.
Install APDs for DCM-03-02
Tuesday (11/12): Begin filling block 19 top up
Install APDs for DCM-03-01
Wednesday (11/13): Begin filling block 20

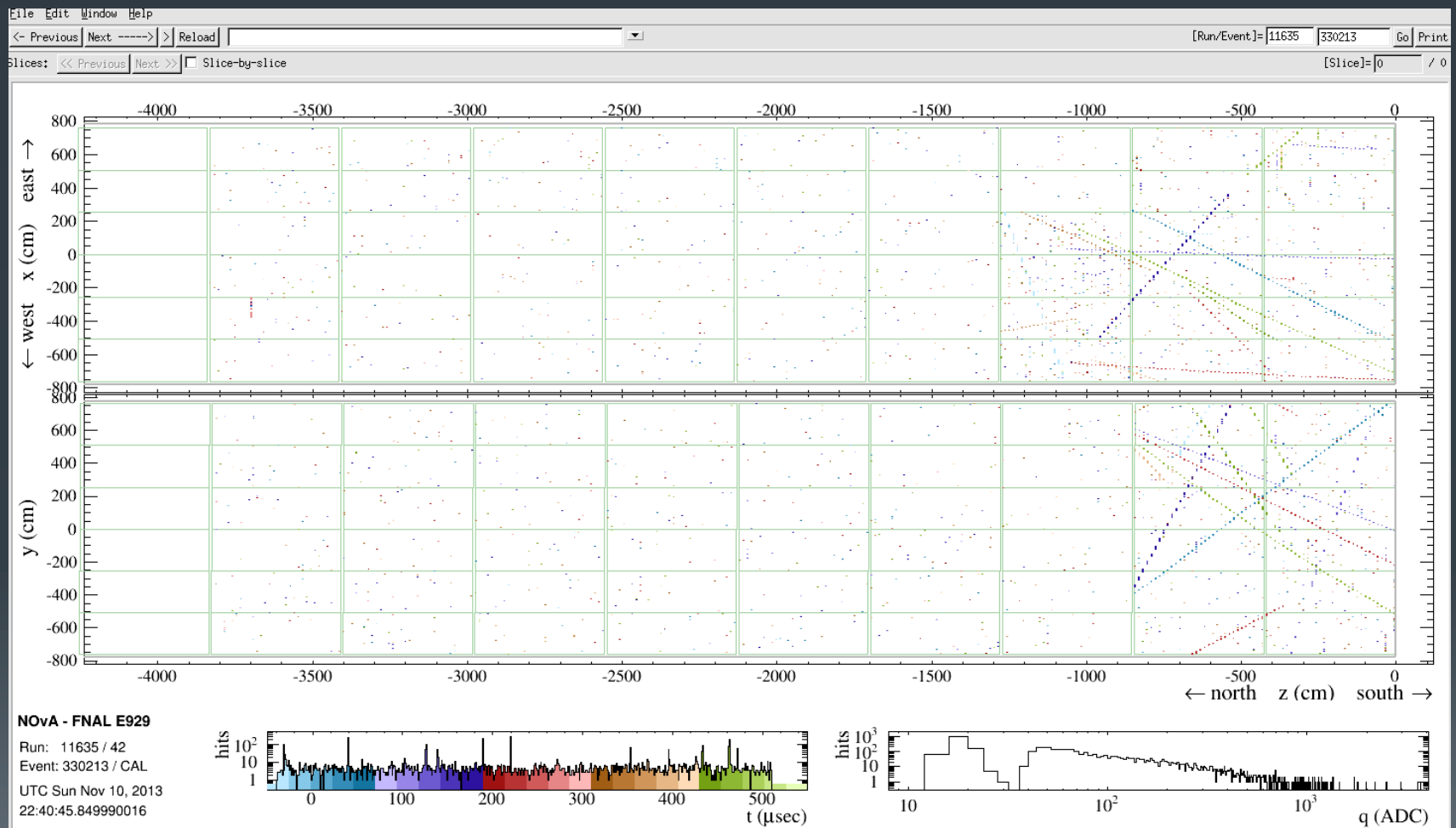
Block 19 Vertical Modules														
Position	31	29	27	25	23	21	19	17	15	13	11	9	7	5
0	1	252	252	250	250	247	251	251	251	250	250	250	250	250
1	1	248	251	248	251	251	251	250	250	251	251	251	251	251
2	1	254	251	251	248	251	251	251	252	250	251	251	251	251
3	1	249	251	248	251	249	251	251	249	249	249	249	249	249
4	1	250	254	248	249	250	251	251	251	251	251	251	251	251
5	1	251	252	252	251	249	253	253	248	251	251	251	251	251
6	1	251	251	249	250	251	251	251	251	251	251	251	251	251
7	1	250	250	250	250	253	249	248	251	248	251	248	251	248
8	1	175	251	249	250	248	250	251	249	250	250	250	250	250
9	1	250	253	250	248	247	249	251	251	252	252	252	252	252
10	1	248	251	251	250	252	249	251	248	251	248	251	248	251
11	1	248	251	251	250	252	249	251	248	251	248	251	248	251

Block 18 Vertical Modules														
Position	31	29	27	25	23	21	19	17	15	13	11	9	7	5
0	1	248	251	249	248	249	250	248	249	252	252	249	249	250
1	1	249	251	250	249	248	251	248	250	250	253	249	249	250
2	1	247	247	250	249	249	247	249	249	249	249	249	249	250
3	1	248	247	251	250	250	249	250	249	248	249	251	252	250
4	1	252	248	250	251	248	250	249	252	251	253	250	248	252
5	1	253	250	250	248	250	250	252	250	250	249	251	250	249
6	1	250	249	250	249	249	251	249	250	248	247	250	249	250
7	1	251	246	249	250	250	249	249	250	249	249	250	251	251
8	1	250	246	249	249	250	250	249	251	248	248	250	249	250
9	1	248	246	247	246	248	248	249	252	250	249	251	249	250
10	1	249	248	249	248	251	251	251	251	250	252	250	253	252
11	1	249	253	249	252	249	250	250	251	251	250	250	252	252

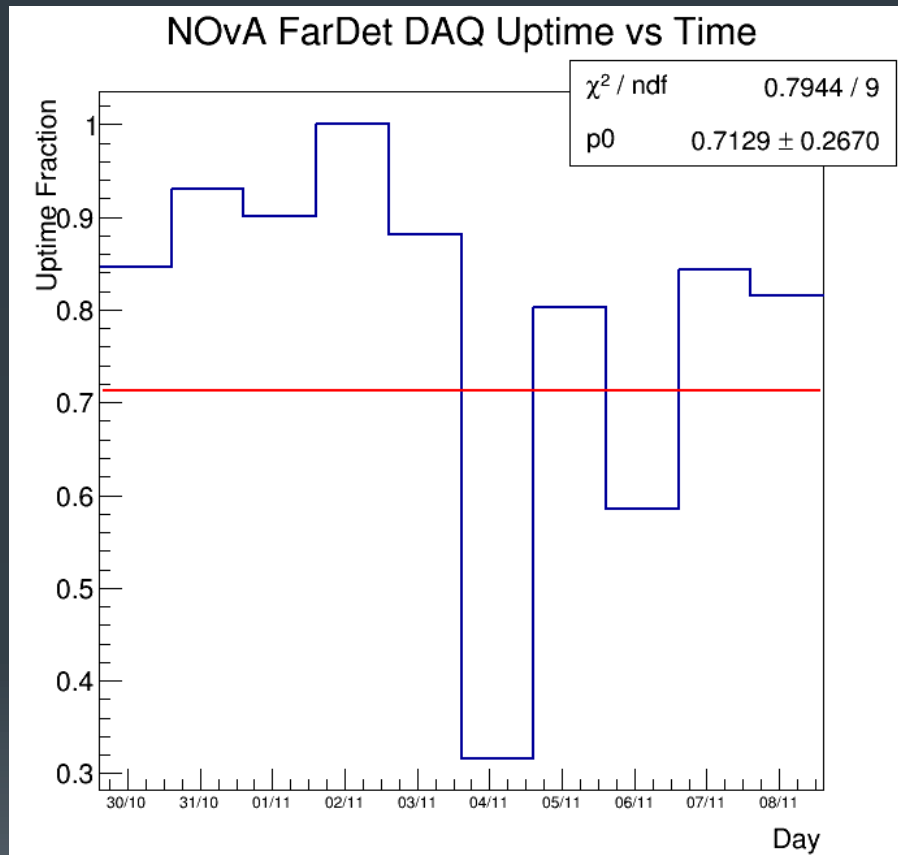
Block 19 Horizontal Modules														
Position	30	28	26	24	22	20	18	16	14	12	10	8	6	4
11	1	244	244	245	244	230	241	242	238	246	237	244	241	241
10	1	246	243	240	245	234	244	249	246	249	245	245	247	236
9	1	240	246	243	248	244	249	241	249	244	245	239	242	240
8	1	242	241	247	239	242	242	248	241	247	245	245	242	244
7	1	245	243	245	246	244	242	241	237	246	236	242	244	242
6	1	244	243	243	243	243	244	243	246	245	242	244	244	243
5	1	241	245	245	251	241	245	248	246	246	244	243	244	248
4	1	241	243	246	249	248	249	244	240	250	242	243	245	238
3	1	245	242	248	244	248	248	248	246	247	240	222	247	243
2	1	247	247	246	246	247	247	245	243	243	247	247	246	246
1	1	246	245	242	241	248	247	245	244	241	249	250	244	242
0	1	247	245	248	245	247	245	246	244	246	243	246	244	245

Block 18 Horizontal Modules														
Position	30	28	26	24	22	20	18	16	14	12	10	8	6	4
11	1	240	240	242	236	243	241	244	243	242	245	243	243	241
10	1	237	245	241	243	242	236	247	236	243	244	242	244	235
9	1	237	238	242	243	245	246	245	244	244	244	244	246	243
8	1	241	237	245	235	242	244	240	248	244	444	243	441	241
7	1	244	245	241	235	243	241	242	242	243	240	243	243	240
6	1	242	246	248	229	245	245	242	238	245	242	241	238	235
5	1	244	242	248	242	241	244	244	243	243	240	243	241	245
4	1	241	240	241	233	241	247	243	239	242	244	245	244	243
3	1	238	240	246	241	246	245	243	245	245	240	246	242	245
2	1	248	246	247	249	249	247	242	247	246	247	247	247	249
1	1	247	248	244	241	248	249	246	243	247	247	247	249	245
0	1	242	242	241	243	244	245	244	244	245	246	245	203	244

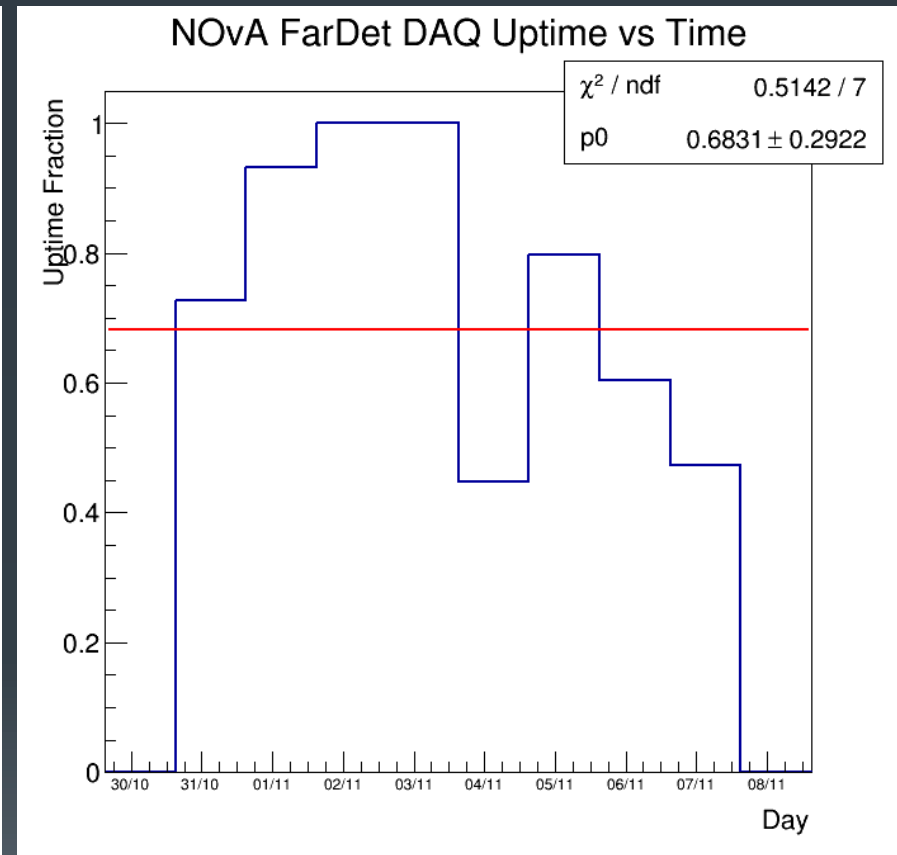
Event at FarDet



FarDet – DAQ Uptime



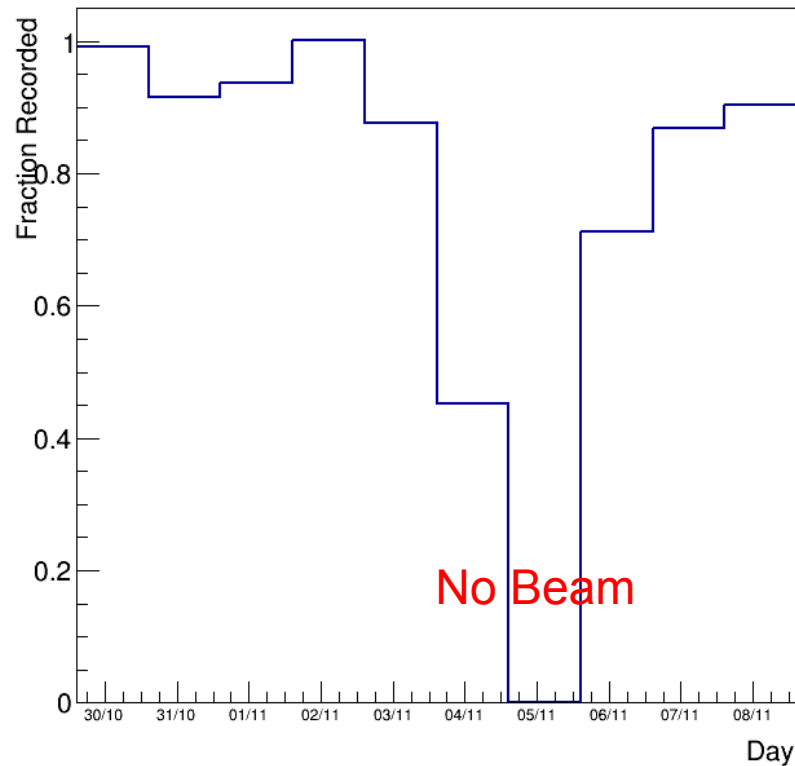
DAQ uptime Partition 1



DAQ uptime Partition 2

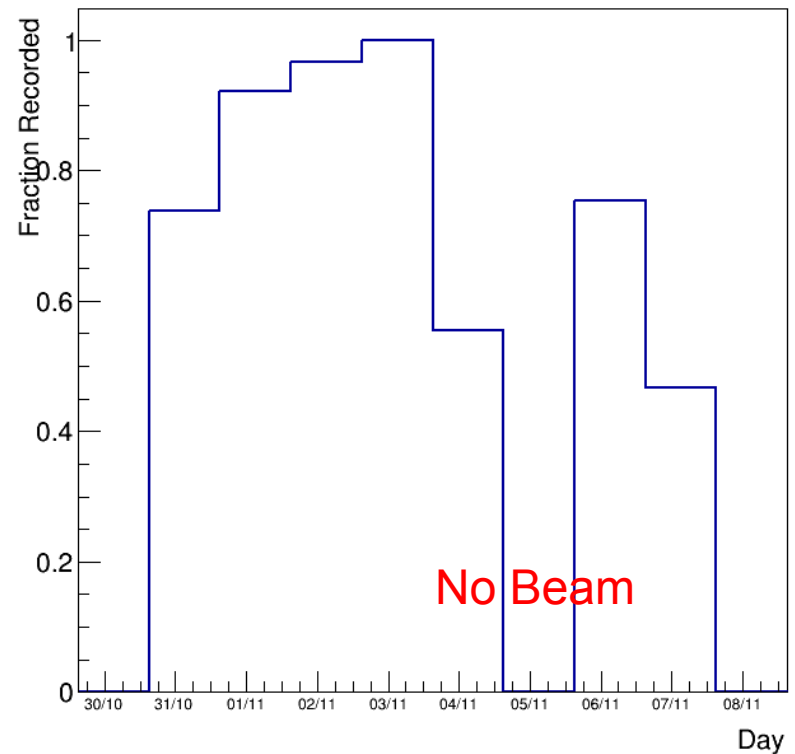
Recorded POT Fraction

Fraction of POTs Recorded by NOvA FarDet vs. Time



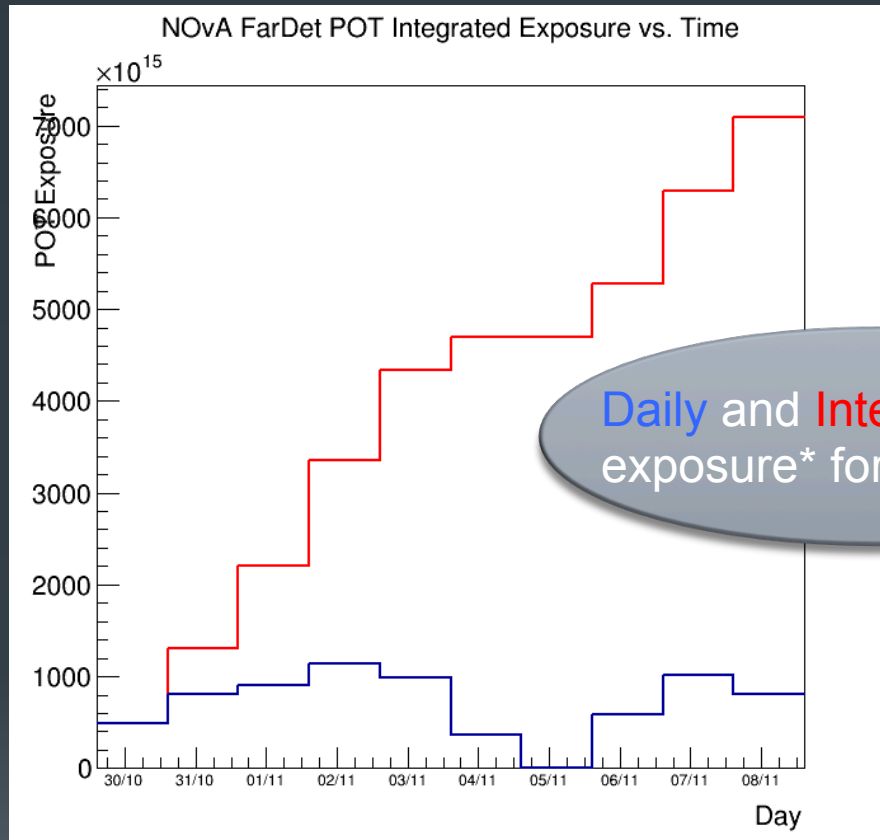
POT Fraction Partition 1

Fraction of POTs Recorded by NOvA FarDet vs. Time

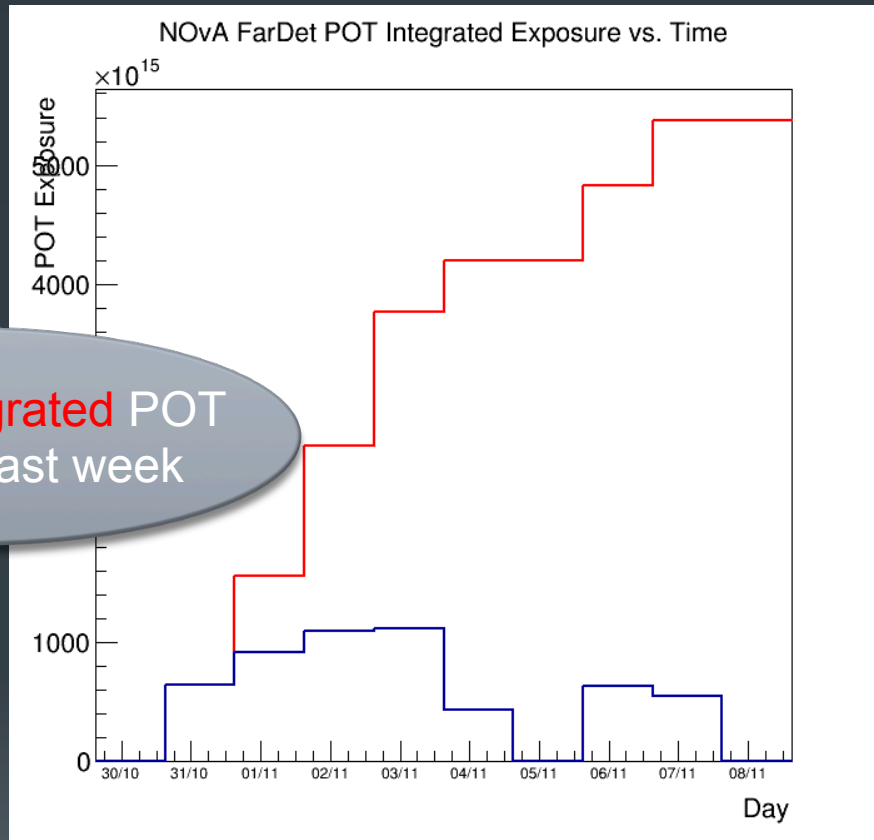


POT Fraction Partition 2

FarDet POT Exposure



Daily and Integrated POT exposure* for last week



* POTs for 2 diblocks of fully-instrumented detector

Summary



- NDOS Prototype running smoothly, useful for testing of software/firmware/monitoring upgrades before rolling out at FarDet – test of new FEBs for Near Detector
- NDSBTest (Near Detector Surface Building Test) 30 APD test stand for cooling/monitoring tests of APDs
- FarDet – 2 diblocks running cold at full gain – very smooth running, 24th block (out of 28) in place – new APDs installed and running at full gain, warm settings – low hit rates so far
- NearDet – $\frac{1}{2}$ of the Near Detector blocks are in place – finish in early January 2014, scintillator filling to start immediately after